10/031,193

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Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-32 (Canceled).

33 (Currently Amended). A method for detecting the presence of a disease in a biological tissue which may contain said disease, wherein said disease is characterized by the expression of tenascin-C in said tissue and wherein said disease is selected from the group consisting of cancer, psoriasis, and atherosclerosis, the method comprising:

a) attaching a marker that can be used in in vivo diagnostics to a tenascin-C nucleic acid ligand to form a marker-nucleic acid ligand complex;

b) exposing said biological tissue which may contain said disease to said marker-nucleic acid ligand complex; and

c) detecting the presence of said disease in said tissue by detecting the presence of said marker-nucleic acid ligand in said tissue.

34-43 (Canceled).

44 (Previously Presented). The method of 33 wherein said marker is selected from the group consisting of radionuclides, fluorophores, magnetic compounds, and biotin.

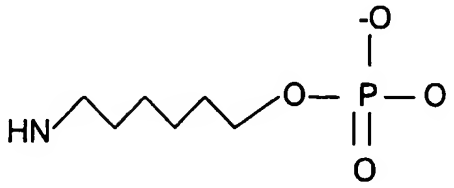
45 (Previously Presented). The method of 44 wherein said radionuclide is selected from the group consisting of technetium-99m (Tc-99m), Re-188, Cu-64, Cu-67, F-18, ^{125}I, ^{131}I, ^{111}In, ^{32}P, and ^{186}Re.

46 (Previously Presented). The method of 45 wherein said marker is technetium-99m.

47 (Previously Presented). The method of 46 wherein said tenascin-C nucleic acid ligand comprises a linker.

48 (Previously Presented). The method of 47 wherein said linker is $(CH_2CH_2O)_6$.

49 (Previously Presented). The method of 47, wherein said linker has the structure



50 (Currently Amended). The method of 47 wherein said tenascin-C nucleic acid ligand is selected from the group consisting of ~~the sequences as set forth in Tables 3 and 4 and Figure 2~~ (SEQ ID NOS: 4-65[]).

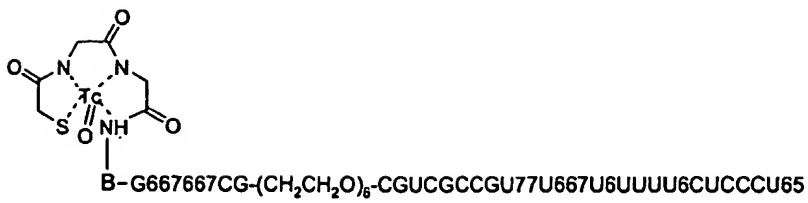
51 (Previously Presented). The method of 50 wherein said tenascin-C nucleic acid ligand is

5'-B-G667667CG-$(CH_2CH_2O)_6$-CGUCGCCGU77U667U6UUUU6CUCCCU65

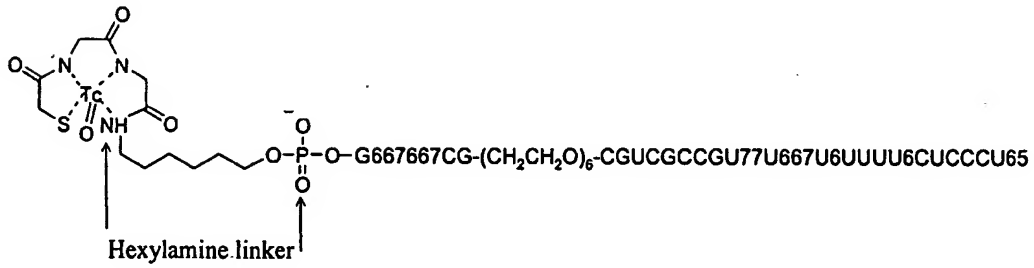
wherein:
all pyrimidines are 2' F;
6= 2'OMe G;
7= 2' OMe A;
5= 3'-3' dT; and
B= linker.

52 (Previously Presented). The method of 51 wherein said technetium-99m is associated with a chelator.

53 (Previously Presented). The method of 52, wherein said complex is



11 54 (Previously Presented). The method of 53 wherein said complex is



55. (Canceled)

12 56 (Previously Presented). The method of 33 further comprising attaching a therapeutic or diagnostic agent to said complex.

13 57 (Previously Presented). The method of 33 wherein said disease is cancer.

14 58 (Previously Presented). The method of 33 wherein said tenascin-C nucleic acid ligand is identified by:

i) contacting a candidate mixture of nucleic acids with tenascin-C wherein nucleic acids having an increased affinity to tenascin-C relative to the candidate mixture may be partitioned from the remainder of the candidate mixture;

ii) partitioning the increased affinity nucleic acids from the remainder of the candidate mixture;

iii) amplifying the increased affinity nucleic acids to yield a mixture of nucleic acids with relatively higher affinity and specificity for binding to tenascin-C, whereby a nucleic acid ligand of tenascin-C is identified.